

IN THE CLAIMS:

Please note that all claims currently pending and under consideration in the referenced application are shown below, in clean form, for clarity. A marked up version of the amendments is attached.

Please cancel claims 1, 2, 4, 5, 7, 9, 11, 12, 15, 59, 61, 63, 64, 65, 67, 68, and 71, without prejudice.

Please amend the claims to appear as follows:

D1
B3
3. (Two times amended) A method for generating an adenoviral vector comprising welding together two nucleic acid molecules wherein both of said nucleic acid molecules comprise only one adenovirus inverted terminal repeat or a part, derivative, and/or analogue thereof having the function of an inverted terminal repeat, said two nucleic acid molecules further comprising partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof.

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D2
6. (Two times amended) A method for generating an adenoviral vector comprising welding together in a mammalian cell two nucleic acid molecules wherein said two nucleic acid molecules comprise partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof; wherein said nucleic acid molecules are not capable of replicating in said mammalian cell prior to said welding together.

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D4
10. (Amended) A method for generating an adenoviral vector comprising welding together two nucleic acid molecules wherein said two nucleic acid molecules comprise partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional

parts, derivatives and/or analogues thereof; wherein at least one of said nucleic acid molecules comprises an adenovirus inverted terminal repeat made essentially free of other nucleic acid on one side using a restriction enzyme that acts on a site which is not present in adenoviral vector nucleic acid in said nucleic acid molecule.

13. (Two times amended) A method for generating an adenoviral vector comprising welding together; in a PER.C6 cell (ECACC 96022940), two nucleic acid molecules wherein said two nucleic acid molecules comprise partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof.

14. (Two times amended) A method for generating an adenoviral vector comprising welding together, in a cell, two nucleic acid molecules wherein said two nucleic acid molecules comprise partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and nucleic acid sequence of interest or functional parts thereof; said nucleic acid in said cell further comprising a nucleic acid sequence encoding an adenoviral E2-region and/or an adenoviral E4-region protein.

16. (Two times amended) A method for generating an adenoviral vector comprising welding together two nucleic acid molecules wherein said two nucleic acid molecules comprise partially overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof; at least one of said molecules comprising an adenoviral capsid protein encoding nucleic acid derived from two different adenovirus serotypes.

17. (Two times amended) A method for generating an adenoviral vector comprising welding together two nucleic acid molecules wherein said two nucleic acid molecules comprise partially

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overlapping sequences capable of combining with one another allowing the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid encoding at least one adenoviral E1-region protein, at least one adenoviral E2-region encoded protein and/or at least one adenoviral E4-region encoded protein and a nucleic acid sequence of interest or functional parts thereof and wherein at least one of said E1-region encoded proteins is under transcriptional control of a conditionally active promoter.

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62. (Amended) A method for generating an adenoviral vector comprising welding together, through homologous recombination in a mammalian cell, two nucleic acid molecules incapable of replicating in said mammalian cell prior to said welding together; said two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof.

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D8

66. (Amended) A method for generating an adenoviral vector comprising welding together, through homologous recombination, two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof; at least one of said nucleic acid molecules provided to said cell comprises an adenovirus inverted terminal repeat which, on one side, is made essentially free of other nucleic acid on one side using a restriction enzyme that acts on a site which is not present in adenoviral vector nucleic acid in said nucleic acid molecule.

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B10
69. (Amended) A method for generating an adenoviral vector comprising welding together, through homologous recombination in a PER.C6 cell (ECACC 96022940), two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof.

70. (Amended) A method for generating an adenoviral vector comprising welding together, through homologous recombination, two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof; said nucleic acid further comprising a nucleic acid sequence encoding an adenoviral E2-region and/or an adenoviral E4-region protein.

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72. (Amended) A method for generating an adenoviral vector comprising welding together, through homologous recombination, two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal and a nucleic acid sequence of interest or functional parts thereof; at least one of said molecules comprising an adenoviral capsid protein encoding nucleic acid derived from two different adenovirus serotypes.

73. (Amended) A method for generating an adenoviral vector comprising welding together through homologous recombination, two nucleic acid molecules comprising partially overlapping sequences wherein said overlapping sequences allow essentially only one

homologous recombination which leads to the generation of a physically linked nucleic acid comprising at least two functional adenovirus inverted terminal repeats, a functional encapsulation signal, a nucleic acid encoding at least one adenoviral E1-region protein, at least one adenoviral E2-region encoded protein and/or at least one adenoviral E4-region encoded protein and a nucleic acid sequence of interest or functional parts thereof and wherein at least one of said E1-region encoded proteins is under transcriptional control of a conditionally active promoter.

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